

## CLAIMS

1. A heating apparatus, comprising:  
5 a coil, and  
a heating element, containing said coil, which  
generates heat by the action of magnetic flux from  
said coil to heat an image on a material to be heated,  
wherein said heating element has a Curie  
10 temperature which is higher than a fixation  
temperature and is lower than a heat-resistant  
temperature of said heating apparatus and has a  
thickness, in an area outside an area corresponding to  
a predetermined size of the material to be heated,  
15 which is larger than a thickness in the area  
corresponding to the predetermined size of the  
material to be heated.

2. An apparatus according to Claim 1, wherein  
20 said heating element comprises a surface layer and a  
heat generation layer which has a thickness larger  
than a thickness of the surface layer when the  
temperature of said heating element is a fixation  
temperature.

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3. An apparatus according to Claim 2, wherein  
said heating element comprises a surface layer and a

heat generation layer which has a thickness, in the area outside the area corresponding to the predetermined size of the material to be heated, larger than a thickness of the surface layer when the  
5 temperature of said heating element is the Curie temperature.

4. An apparatus according to Claim 1, wherein said heating element is a hollow roller which is  
10 changed in an inner diameter so as to change the thickness of said heating element.

5. An apparatus according to Claim 1, wherein said apparatus further comprises power supply means  
15 for supplying power to said coil so that a temperature of said heating element in a conveyance area of the material to be heated is a predetermined fixation temperature.